

## NECKTIE RESTRAINING DEVICE

### FIELD OF THE INVENTION

5       The invention is in the field of apparel devices and specifically in the field of necktie restraining devices for engaging a necktie using the necktie label and two shirt buttons positioned above and below the necktie label.

### RELATED APPLICATIONS

10       This application claims priority from Provisional Application No. 60/395284, filed 7/12/02.

### BACKGROUND OF THE INVENTION

15       "Four-in-hand" neckties enhance the business appearance of an individual, and may be quite expensive. A "four-in-hand necktie" is placed around the wearer's neck and then tied in one of a variety of knots, resulting in a wide front panel and a narrow back panel hanging down the front of the wearer's shirt. When wearing a loose hanging  
20       necktie around mechanical devices, such as motor vehicle engine compartments and copying machines, a risk arises of the loose hanging necktie getting caught in the mechanical device. Additionally, a wearer must exercise care when eating so that a loose hanging necktie does not become soiled by accidental contact with food and/or drink. Another concern of a person wearing a necktie is the look of disarray and the non-  
25       businesslike presentation caused by an unrestrained necktie being blown about on a windy day.

An array of necktie control devices have been tried over the years, to include tie tacks, tie bars, tie clips, and plastic, covert tie restraints. These prior art devices have proven unsatisfactory for a variety of reasons. Some have resulted in holes in the necktie, or other damage to the necktie fabric. Some do not permit sufficient movement or play in the panels of the necktie. Some are constructed of multiple small pieces that are easily lost. Finally, some prior art devices do not present an appropriate appearance when used in conjunction with the necktie.

Therefore, several needs exist for a necktie control device that would be an improvement over the prior art. One need is for a necktie control device that would be covered by the panels of the necktie. Another need is for a necktie control device that would affix to two shirt buttons, in such a way as to not damage the necktie, the shirt buttons and their thread, or the front of the shirt. More specifically, a need exists for a necktie control device that would affix to the shirt buttons above and below the necktie label on the back of the front necktie panel. An additional need is for a necktie control device that would allow for sufficient movement of the necktie so as not to affect its normal appearance, yet restrain the movement of the necktie sufficiently to prevent the necktie from getting soiled, damaged, or caught in equipment or machinery. A further, need exists for a necktie control device with sufficient restraint to prevent the necktie from being blown about the wearer on a windy day. A need exists for a necktie control device that can be constructed of material that will permit utility of the device for a reasonable period of time. Finally, it would be desirable for a necktie control device to be adapted for placement of a variety of designs or artwork on the face or faces so as to make it more attractive, fashionable, and contemporary.

United States patents that have been issued in this area fall into three categories.

The first category is for devices that require an attachment to the necktie itself. United States Patent 4,554,710 discloses a bar for engagement to a shirt button hole attached by

5 a flexible member to a first attachment device. A second attachment device is affixed to the necktie by an adhesive. The first and second attachment devices are adapted for removable engagement with each other. United States Patent 4,972,523 discloses a

retaining portion affixed to the necktie and a button retaining portion having a button hole for affixing to a button on a wearer's shirt. When the retaining portion and the button

10 retaining portion are placed in contact they are removably engaged to each other. United States Patent 5,095,546 discloses a longitudinal member attached to a necktie and a

sliding transverse member with a buttonhole for attachment to a shirt. United States Patent 5,109,547 discloses a base member affixed to the necktie and a button attachment

member having a plurality of holes for receiving a shirt button. The button attachment

15 member is sliding engaged to the base member. United States Patent 5,715,538 discloses a first clip for attachment to the tail of a necktie and a second clip for attachment to the

overlapping edge of a shirt front. The first clip and the second clip each have a joining surface for removable engagement with each other. United States Patent 5,813,053

discloses a tie restraint apparatus comprising a vertical member constructed from the

20 same material as the necktie and bonded to the necktie using a "fusion cloth." A

adjustable horizontal member is attached to the vertical member and has a plurality of holes for attaching the horizontal member to a button on a wearer's shirt. The adjustable

horizontal member slides up and down the vertical member. United States Patents

6,926,923 and 5,926,923 disclose a retaining clip adapted for attachment to a shirt button and a fastener affixed to the tie. The fastener has an eyelet for removable engagement with a vertical prong on the retaining clip.

The second category is for devices that may damage the necktie. United States  
5 Patent 5,031,284 discloses a bar connected by a chain to a retaining device. The retaining device has pointed tips for penetrating the rear fold members of the necktie. United States Patent 5,235,730 discloses a holding device connected to a cross bar by a chain or other flexible device. The crossbar inserts into buttonhole of the wearer's shirt and the holding device is formed to provide a clamp for engagement with the rear fold of the  
10 wide panel of a necktie.

The third category is for devices that neither attach to the necktie nor are constructed in a way that may damage the necktie. United States Patent 5,337,457 (the '457 patent) discloses a one piece device for passing through the loop formed by the necktie label. The device has an attachment member at each end with a slot to receive  
15 and retain the threads which hold a button on the shirt. United States Patent 5,353,438 (the '438 patent) discloses a one piece device comprising a longitudinal strip of flexible material with a button hole on one end and a circular hole on the other. The device is adapted to form a loop around the necktie label and affix to a button on the wearer's shirt.

The third category discussed above solves a number of the needs identified;  
20 however, the '457 patent does not address the problem of using the device when the necktie label is positioned over a shirt button. Moreover, neither the '457 patent nor the '438 patent provide a flat surface for affixing artwork. Such a surface would be desirable in order to improve the overall appearance and utility of a necktie restraining device.

In order to find a device that would meet all of the needs identified above, a variety of pre-existing components were considered such as metallic button covers, plastic one-piece button covers and a variety of plastic or metal chains of varying design and thickness. In considering adaptation of pre-existing components, ease of operation, durability and adaptation for presentation of artwork or design were considered. In regard to placement of artwork or designs on the necktie restraining device United States Patent 5,526,551 discloses snap on ornamental assemblies comprising a cap that can snap on to a base member.

## SUMMARY OF THE INVENTION

The necktie control device that meets the needs identified above comprises two hinged button covers attached to a length of chain. The chain length is between approximately three and one-half inches and approximately four inches. The chain affixes to the two button covers using two snap rings. To use the invention, the wearer puts on a necktie in the usual manner. The upper button cover is placed on the shirt button located above the necktie label on back of the front necktie panel. The lower button cover and chain are dropped through the opening between the necktie label and the front necktie panel. The lower button cover is then placed on the first shirt button below the necktie label.

## BRIEF DESCRIPTION OF DRAWINGS

FIG. 1. A frontal view of the necktie control device.

FIG. 2. A side view of the necktie control device.

FIG. 3 An enlarged view of a button cover, snap ring, hinge, and chain.

FIG. 4. A depiction of how the necktie control device affixes to the shirt buttons  
on the wearer's shirt.

## DESCRIPTION OF THE PREFERRED EMBODIMENT

FIG. 1 depicts a frontal perspective of necktie control device **100**. Necktie control device **100** has first button cover **10** and second button cover **12** connected by chain **18** having two connecting rings **16**, one at each end of chain **18**. First button cover **10** and second button cover **12** are of identical construction. In the preferred embodiment, all components may be gold or silver-plated.

FIG. 2 is a side view of necktie control device **100**, with front **22** of first button cover **10** and front **22** of second button cover **12** in an open vertical position, and back **24** of first button cover and back **24** of second button cover opened and in a horizontal position. Each first button cover **10** and second button cover **12** have front **22** rotatably connected to back **24** by hinge **14** allowing front **22** to be opened substantially in relation to back **24**.

Each connecting ring **16** of chain **18** is connected to one of the hinges **14** so that chain **18** extends between and flexibly joins first cover **10** to second cover **12**. In the preferred embodiment, the length of chain **18** is in the range of approximately three and one half to four inches which provides for sufficient movement of necktie panels **20** (See Fig. 4) and also to allow necktie retraining device **100** to be used should the necktie be knotted in such a way as to position label **28** directly over the shirt buttons upon which first cover **10** and second cover **12** are placed. When label **28** is positioned directly over a

shirt button, the flexibility of chain **18** and the three and one half to four inch length allows necktie restraining device **100** to be used without the need for the user to undo and retie the necktie in order to reposition label **28**. Moreover, the length and flexibility of chain **18** is a distinct improvement over the one piece device disclosed in the '457 because the '457 patent device cannot be used when a necktie label such as label **28** is positioned over a button of the wearer's shirt. Persons skilled in the art are aware of alternative devices for connecting first button cover **10** and second button cover **12**.

FIG. 3 depicts a detailed view of one of the identical first button covers **10** and second button covers **12** in a completely open position showing the inside area of front **22** and back **24**.

Back **24** has slot **26** that allows placement of back **24** around a shirt button. Slot **26** is adapted to permit back **24** to be placed under a shirt button and around the thread that holds the button to the shirt. Slot **26** begins at the outer circumference of back **24** and narrows as it approaches the center of back **24**. Circular opening **25** is centrally located in back **24** and slot **26** joins circular opening **25** so that the thread or threads that hold the button to the shirt can be guided into circular opening **25**. The thread or threads that hold the button to the shirt may compress slightly as they pass along the narrowing slot **26** and then expand when they enter circular opening **25**. Back **24** has a pair of identical and diametrically opposed posts **30** fixedly engaged to back **24**.

Front **22** has aperture **23** for receiving hinge **14** of back **24**. When hinge **14** is formed front **22** and back **24** are joined. Hinge **14** is formed as follows. An extrusion of back **24** is placed through aperture **23** on front **22**, and then bent to create hinge **14**. More particularly, hinge **14** is formed from a single flat piece of metal from which back **24** is

cut. Hinge **14** initially extends outward from back **24** as a longitudinal flat bar. The longitudinal flat bar is inserted into aperture **23** of front **22** and is then bent upward and over in a circular manner to form a circular opening engaging aperture **23** and forming hinge **14**.

5        Posts **30** are also formed from the single flat piece of metal from which back **24** is cut. Post **30** are initial short flat bars with rounded ends extending outwardly from diametrically opposed edges of back **24**. The short flat bars are bent upward at an approximate ninety degree angle to back **24** to form posts **30**. Front **22** can be closed over back **24** and held closed by pressure from posts **30**. When front **22** is closed over the  
 10    button, snapping onto back **24**, front **22** presents a flat, circular front upon which artwork such as designs or logos may be printed or screened. In addition, rim **21** of front **22** surrounds the button in a full 360 degree circle. Because rim **21** surrounds the button in a full 360 degree circle, first cover **10** and second cover **12** cannot come loose from the buttons they enclose unless front **22** is disengaged from back **24** and opened substantially.  
 15    The ability of first cover **10** and second cover **12** to enclose the shirt buttons to which they are affixed is an improvement over the one piece device disclosed in the '457 patent for at least three reasons. First, the enclosure provides for a more durable attachment when used repeatedly. Second, the enclosure cannot come loose from the button during movement by the wearer so long as front **22** and back **24** remain engaged by posts **30**.  
 20    Third, the enclosure provides a flat, circular front upon which artwork such as designs or logos may be printed or screened which is a utility possessed by none of the prior art patents including the '457 patent. The ability to display artwork on the flat, circular front makes necktie restraining device **100** adaptable for gifts and advertising.



Ring **16** is opened, placed through the end link of chain **18**, and around hinge **14** of back **24**, and then closed to secure chain **18** to first button cover **10** and second button cover **12**. Use of ring **16** is critical in that it allows both attachment to chain **18** and also permits hinge **14** to open completely.

- 5 Chain **18** is affixed to first button cover **10** by ring **16**. One ring **16** is affixed to each end of chain **18**. Each ring **16** affixed to an end of chain **18** is also affixed to hinge **14** of back **24** of first cover **10** or second cover **12**. In order to affix ring **16** to chain **18**, ring **16** is opened slightly and placed through the last loop on the end of chain **18**. Ring **16** is then placed around the small neck on back **24** near where it is hinged to the front **22**.
- 10 Ring **16** is then closed, securing the chain **18** to first button cover **10**. At the opposite end of the chain **18**, another ring **16** is affixed to second button cover **12** in the same manner. An alternative method of attaching chain **18** to first button cover **10** and second button cover **12** is by spot-welding.

- Fig. 4 illustrates how necktie control device **100** affixes to the shirt buttons above
- 15 and below necktie label **28** located on the back of necktie front panel **20**. For illustration purposes, the lower half of necktie panel **20** has been turned around to show how chain **18** passes between necktie label **28** and necktie front panel **20**. To use necktie restraining device **100**, a wearer puts on a necktie in the usual manner. The wearer then locates the shirt button above necktie label **28** on the back of necktie front panel **20**. First button
- 20 cover **10** is opened and back **24** is placed behind the shirt button using slot **26**. Front **22** is then snapped closed over the shirt button and back **24**, and held closed by posts **30**. Chain **18** and the second button cover **12** are then placed through label **28** on the back of the necktie front panel **20**. Second button cover **12** is then opened, and the shirt button

below the necktie label 28 is placed in slot 26 of back 24 of second button cover 12. Front 22 is then snapped shut and is held in place by posts 30 on back 24. Removal of the necktie restraining device may be accomplished by reversing the steps described above.

5           The wearer is afforded a necktie control device that does not damage the necktie fabric, provides sufficient mobility of the necktie panels, and controls the necktie under a wide variety of indoor and outdoor conditions. It also presents a new and refreshing fashion look. Additionally, the surfaces of the button covers allow the use of a limitless amount of logo or artwork presentation to further enhance its appearance.

10           With respect to the above description, it is to be realized that the optimum dimensional relationships for the parts of the invention, to include variations in size, materials, shape, form, function and manner of operation, assembly and use, are deemed readily apparent and obvious to one skilled in the art, and all equivalent relationships to those illustrated in the drawings and described in the specification are intended to be  
15 encompassed by the present invention. The novel spirit of the present invention is still embodied by reordering or deleting some of the steps contained in this disclosure. The spirit of the invention is not meant to be limited in any way except by proper construction of the following claims.